

G-12 Counterfeit Parts Activity

Prepared for PSMC Meeting
San Diego, CA October 25, 2007

Presenter

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G-12 Committee Vice Chair

Background

- Task Group formed May 2006
- Decision was made to generate a Standard
 - Admittedly, a comprehensive Standard is outside of our charter
 - Evolved into an Engineering Bulletin (EB)
- Meetings held to investigate problem
- Draft EB out for ballot “imminently”

Findings, 1

- Scope of counterfeit activities not widely appreciated
 - In 2004 estimate was 5-7% of sales = \$512B
 - Counterfeit goods seized by DHS = \$140M
 - 70% originated in China
 - In 1991, 192,000 people in China died from consuming counterfeit medicine.
 - 750,000 jobs lost in US due to counterfeiting
 - Problems with wine, consumer goods, and software overshadow other items
 - Searching for “Counterfeit Parts” on Yahoo yields over 1.65M hits
 - Counterfeit parts usually sell for 50% or less of genuine parts, creating intense pressure
 - ITAR restrictions have increase the demand for counterfeit parts
 - 46% of suppliers on the DKSP are “independent distributors” i.e. “brokers”

Findings, 2

- Multiple ways to Counterfeit
 - Reclamation (Citiraya)
 - Joint ventures (make more than license allows)
 - Remarking (100MHZ part becomes 200MHZ)
 - Reverse counterfeiting
 - Underground (literally) and mobile operations
 - Theft (and threats)
- Organized Crime and Terrorist links not publicized

Findings, 3

Case Study

- 2004 J S Enterprise in Philippines
 - Over 10M ICs seized
 - Many (Most? All?) were stolen
 - Semiconductor manufacturer manager(s) targeted for assassination
 - More details on G-12 website, January 2007 minutes:
<http://66.34.169.103/sstc/G12/g12p/#minutes>
 - (Login = G12, Password = EIA5962)

Engineering Bulletin draft

DEFINITION:

A counterfeit item is one whose identity or pedigree has been deliberately altered or misrepresented by its supplier.

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• **Identity:** Original manufacturer, part number, date code, lot number, testing, inspection, documentation, or warranty, etc.

• **Pedigree:** Origin, ownership history, storage, handling, physical condition, previous use, etc.

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Three Sections:

- **1. Prevention:**
 - Actions recommended for procuring parts and materials with a full warranty.
 - Actions recommended for minimizing risks and protecting your Program from counterfeiting.
 - Actions recommended when buying from a non-authorized supplier.
- **2. Detection:**
 - Actions recommended when procuring parts from an unauthorized supplier or otherwise suspect that a part or material at risk of being counterfeit has been procured.
- **3. Risk Mitigation**
 - Actions recommended when no reasonable alternatives exist (e.g. a redesign is required, an unacceptable schedule delay will result, the program or customer cannot bear the additional cost) and the decision has been made to procure from a non-authorized supplier.

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The Team's Recommendation:

The G-12 Counterfeit Task Group has unanimously agreed that:

- The only control or safeguard is to only procure from the Original Equipment Manufacturer (OEM) or their designated franchisees. All other procurement approaches offer significant risk.**
- Any part or material that has been out of the OEM's authorized supply chain has some risk of not fulfilling its intended mission objectives.**

Future

- FAR problems
 - Ownership and return
 - (removed) offered to help
- GIDEP Reporting in its infancy
- Engineering Bulletin in ballot
- G-12 has no intention of continuing effort
- G-12 willing to support other anti-Counterfeit efforts and rescind EB when replaced by an Industry Standard